

156724

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
841 Chestnut Building  
Philadelphia, Pennsylvania 19107

**SUBJECT:** Approval of a Removal Action  
Coeburn Dump Site  
Coeburn, Wise County, Virginia

**DATE:** MAY 14 1996

**FROM:** Thomas C. Voltaggio, Director  
Hazardous Waste Management Division (3HW00)

**TO:** Elliot P. Laws, Assistant Administrator  
Office of Solid Waste and Emergency Response (5101)

**THRU:** Stephen Luftig, Acting Director  
Office of Emergency and Remedial Response (5201)

**ATTN:** Thomas R. Sheckells, Director  
Regions 3/8 Accelerated Response Center (5201G)

**ISSUE**

The attached Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) funding request pertains to the Coeburn Dump Site in Coeburn, Wise County, Virginia. An assessment performed in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300, by my staff has identified an imminent threat to public health or welfare or the environment due to the presence of hazardous substances, pollutants, or contaminants at the Site. These substances present direct contact, inhalation, and ingestion hazards to any person entering the Site; they also pose a threat of migration.

The On-Scene Coordinator (OSC) has determined that this Site meets the criteria for initiating a Removal Action under Section 300.415 of the NCP. Funds have been requested in the amount of \$1,852,590, of which \$1,611,150 are Extramural Costs, to mitigate the threats posed by this Site. Pursuant to authority given under Delegation of Authority 14-1-A to approve CERCLA Removal Actions with a total cost of \$2 million and completion within 12 months, Region III has approved this request for funds.

**Attachment: Initial Funding Request**

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
841 Chestnut Building  
Philadelphia, Pennsylvania 19107

SUBJECT: Request for Funds for a Removal Action      DATE: MAY 14 1998  
Coeburn Dump Site  
Coeburn, Wise County, Virginia

FROM: Robert Kelly, On-Scene Coordinator *Robert Kelly*  
Fund Removal Section (3HW31)

TO: Thomas C. Voltaggio, Director  
Hazardous Waste Management Division (3HW00)

THRU: Abraham Ferdas, Associate Director *Abraham Ferdas*  
Office of Superfund (3HW02)

I. ISSUE

An assessment performed in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300, by the On-Scene Coordinator (OSC) has identified a threat to human health and the environment due to the presence of hazardous substances at the Coeburn Dump Site in Coeburn, Wise County, Virginia. The Site is a defunct regional dump that closed down sometime around 1970. The Dump is located on a steep slope. Site soils are contaminated with lead and pose a direct contact, inhalation, and ingestion threat. The Site is located up-gradient from the Guest River, which is used heavily for recreation and fishing by local inhabitants.

II. BACKGROUND

A. Site Description

The Coeburn Dump Site is located on Route 72 approximately 1.5 miles south of Coeburn, Virginia, in Wise County (a Regional Site Location Map, Topographic Map, and Site Sketch are included as attachments to this Memorandum). The Site is located in a rural area, with the nearest residence within approximately 300 feet of the Site. The Town of Coeburn owns the property.

There are 15 houses within 1/2 mile to the south and 19 houses within 1/2 mile to the north and northeast of the Site.

---

The Coeburn Dump Site should not be confused with the Coeburn Battery Site, which is located approximately 1/4 mile west of Coeburn, Wise County, Virginia.

Children live in several of the homes across Route 72. All houses within a one mile radius of the Site, as well as those within the Town of Coeburn, are all on public water obtained from the Tom's Creek Reservoir north of Coeburn. The Site is unfenced, but has an entrance gate which can be locked. Thick woods are located to the north, south, and east along the Site boundary with Route 72. A steep slope dropping to the Guest River Valley bounds the Site on the west. The only structure present onsite is a pumping station for the Coeburn municipal water system. The pumping station increases water pressure uphill to the Flatwoods Storage Tank, several small subdivisions, a Virginia Department of Transportation Facility, and other isolated houses that lie south of the town. The building and a surrounding few feet of property are owned by the town of Coeburn. Power lines for Old Dominion Power also cross the Site from east to west. The Site sits along a steep grade that drops down to a valley that borders the Guest River, located approximately 125-150 yards to the northwest. The Jefferson National Forest begins 1/2 mile south of the Site.

The Guest River flows approximately 5 miles to its confluence with the Clinch River. No drinking water intakes are found along the Guest River below the Site nor within at least a 15 mile distance limit down the Clinch River. The only drinking water intake found in the area is downstream of St. Paul, Virginia, which is 10 miles east of Coeburn on Route 58. The intake is upstream of the confluence of the Guest River and the Clinch River.

The Guest River is reported to be used heavily for recreation and fishing by local inhabitants, but no endangered or threatened species were reported to live in or around the river. The Clinch River in the area of Coeburn, however, is reported by the US Fish and Wildlife Commission to be the habitat for numerous rare mussel species. Several of the species are reported to be globally rare and listed as threatened or endangered. The Clinch River is also used for recreation and fishing.

The Virginia Department of Health reports that there are two deep drinking water wells (approximately 300 feet) in Coeburn that supply water to two mobile home parks located approximately 1.2 miles northwest (and upgradient) of the Site (Morgan's Trailer Park and Oakview Trailer Park). There are approximately 60 residents of these parks using this well water.

The average annual rainfall, as recorded by the National Oceanic and Atmospheric Administration (NOAA) at the Wise Station in Wise County, Virginia, is 37.08 inches. The highest normal monthly precipitation is in July, 4.97 inches, and the lowest normal monthly precipitation is in October, 1.88 inches.

AR200003

## **B. Site Background**

The Site was reported to have been a regional dump for Wise County as early as the 1940's or 1950's and received batteries as well as other wastes. The dump was closed sometime around 1970 and was subsequently capped by the Forest Service Center Job Corps.

The Site was reported to the Superfund Program of the Virginia Department of Environmental Quality (VADEQ) by members of the VADEQ's Waste Division Regional Office in Roanoke, and by the Virginia Department of Emergency Services (VADES). VADEQ investigated the Site following receipt of information suggesting that Coeburn Produce, a party associated with the Coeburn Battery Site located west of Coeburn, may have disposed of batteries at the Coeburn Dump Site. Interviews with residents conducted by VADES indicate that the Coeburn Dump Site had been used for battery dumping sometime during the 1940's and 1950's. An April 28, 1993 Site visit by VADEQ and VADES revealed the presence of old style battery casings, rusting drums, and other solid waste and debris.

On April 8, 1995, the On-Scene Coordinator (OSC) and the Technical Assistance Team (TAT) met with Jack Tolbert of VADES at the Coeburn Town Dump Site to assess conditions at the Site and discuss Site history. Fifteen to twenty auto and marine battery casings were visually documented during the assessment. Based upon historical data and visual observations made, the OSC informed TAT that a sampling assessment would need to be performed to identify the presence of contamination.

## **C. Quantities and Types of Substances Present**

On April 18-19, 1995, TAT conducted a sampling assessment of the Site. TAT initially reviewed the perimeter of the Site, including the area along the Guest River (which is approximately 150 yards below the dump) to identify logical sampling locations.

A total of 29 soil samples were collected at three levels; the plateau near the entrance to the dump (top level), a natural bench area approximately 50 feet below the plateau where various types of debris had collected over time (second level), and the bottom level adjacent to the Guest River (third level). A power auger was used to collect the samples at depths typically ranging from 1-6 feet based on the amount of debris or fill encountered during sampling. Depth samples were collected from the top level while superficial samples were collected from the lower two levels. A superficial composite sample was collected from each of the three levels. Battery casings were found at two of the sample locations (top and second levels). A significant amount of bedrock was encountered at sample locations 20 yards east of

AR200004

the dump area along the top plateau near the entrance to the Site.

Analysis of the samples revealed lead contamination ranging from 317-17,200 parts per million (ppm) total lead along the top level of the dump with the higher readings being found predominantly along the top edge of the dump. The natural bench area (second level) was found to contain total lead levels ranging from 152-6,030 ppm. The area along the bank of the Guest River (third level) was found to contain minimal levels of lead contamination, ranging from 0-15 ppm. No PCB contamination was found in any of the three composite samples analyzed. The analytical summary and the sample location sketch are included as attachments to this Memorandum.

#### **D. National Priorities List Status**

The Coeburn Dump Site is not on the National Priorities List (NPL), nor is it currently proposed for inclusion on this list.

#### **E. State and Local Authorities' Roles**

VDEQ and VDES both conducted preliminary site assessments at the Site and provided the OSC with background information.

### **III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT**

Section 300.415 of the NCP outlines factors to be considered in determining the appropriateness of a Removal Action. Paragraphs (b)(2)(i), (ii), (iv), (v), and (vii) of Section 300.415 directly apply as follows to the conditions as they exist at the Coeburn Dump Site:

#### **300.415 (b)(2)(i)**

"Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants"

Surface soil samples collected during the assessment have established the presence of significant levels of lead in on-Site soils. These soils pose a direct contact threat to any person or animal wandering through this unfenced Site. Runoff to the Guest River as a result of precipitation may carry lead-contaminated soils areas offsite. In addition, lead may be transported through windborne migration of dust.

AR200005

300.415 (b)(2)(ii)

"Actual or potential contamination of drinking water supplies or sensitive ecosystems"

The Site is adjacent to the Guest River, which is used heavily for recreation and fishing by local residents. The Guest River converges with the Clinch River, which is the habitat of three Federally-listed endangered species of mussels.

300.415 (b)(2)(iv)

"High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate"

Both surface and subsurface samples collected during the assessment revealed elevated levels of lead in the soil. A composite surface sample at the top of the slope revealed a level of 79,000 mg/kg lead.

300.415 (b)(2)(v)

"Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released"

The Site is located on a steep slope up-gradient from the Guest River. Surface contamination is expected to migrate offsite via windborne dispersion of dusts and/or runoff due to normal precipitation in the area.

300.415 (b)(2)(vii)

"The availability of other appropriate federal or state response mechanisms to respond to the release"

VADEQ has requested assistance in mitigating the hazards posed by this Site as the financial resources to address this Site are currently unavailable.

#### IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

AR200006

## **V. PROPOSED ACTIONS AND COSTS**

### **A. Proposed Actions**

The actions proposed for the Coeburn Dump Site are designed to eliminate the imminent threat posed by existing conditions at the Site. Based on the review of background information and analytical data of the Coeburn Dump Site, the following three-phased action is planned:

#### **Phase 1. Setup, excavation, confirmatory sampling, and further excavation:**

Set up Site Command Post.

Determine extent of contamination, including off-site migration.

Implement Site access restrictions.

Excavate soils contaminated with lead in excess of 500 ppm.

Temporarily stage excavated soil on the Site.

Use XRF to determine if additional excavation is necessary (i.e., whether lead contamination exists in Site soils in excess of 500 ppm).

Collect samples for disposal analysis.

#### **Phase 2. Disposal logistics:**

Conduct disposal analysis.

Make transportation and disposal arrangements.

#### **Phase 3. Transportation and disposal:**

Conduct transportation and disposal operations.

Hydroseed excavated areas for erosion control.

AR200007

**B. Estimated Costs**

	<u>Proposed Cost</u>
<u>Extramural Costs</u>	
Regional Allowance	
ERC's	\$1,246,000
SATA	155,000
	-----
Subtotal	\$1,401,000
Other Costs not Funded from the Regional Allowance	
15% Contingency	210,150
	-----
Total Extramural	\$1,611,150
<u>Intramural Costs</u>	
Direct Costs	\$ 87,840
Indirect Costs	153,600
	-----
Total Intramural	\$ 241,440
ESTIMATED TOTAL PROJECT CEILING	\$1,852,590

**C. Contribution to Remedial Performance**

The Coeburn Dump Site is not currently an NPL Site. At this time, there are no plans for a long-term Remedial Action. The proposed Removal Action is consistent with accepted removal practices and is expected to abate the threats that meet the NCP removal criteria. The proposed action is not anticipated to impede future remedial responses at this Site.

**D. Compliance with ARARs**

The proposed Removal Action set forth in this Memorandum will comply with applicable or relevant and appropriate environmental and health requirements, to the extent practicable, considering the exigencies of the situation. The OSC contacted VADQ's Paul Spaulding to request a complete listing of proposed State ARARs by April 15, 1996. To date, none have been received. Nevertheless, every attempt will be made to coordinate with appropriate State contacts to ensure that State ARARs are

AR200008



identified and complied with to the extent practicable, during all phases of this Removal Action.

**VI. EXPECTED CHANGE IN THE SITUATION SHOULD NO ACTION BE TAKEN OR ACTION DELAYED**

If no action is taken or the action is delayed, the direct contact, inhalation, and ingestion threats posed by lead contamination to nearby residents, including children, in the vicinity of the Site will continue. Contamination of residences along and downgradient from the Site could occur from the offsite migration of contamination.

**VII. OUTSTANDING POLICY ISSUES**

The OSC recognized that the Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities (OSWER Directive No. 9355.4.12 (July 14, 1994) represents the latest EPA guidance concerning lead cleanup and remediation actions under CERCLA and RCRA. While it is the OSC's desire to apply this directive to the proposed actions at this Site, it is not presently clear to the OSC how to do so for removal actions. Consequently, the proposed actions and the cleanup goals for lead have been developed for the specific circumstances currently known at the Site based on the previously issued guidance (OSWER Directive No. 9355.4-02 (September 1989)), which recommended soil cleanup levels of 500 to 1,000 ppm for protection of human health at residential CERCLA sites.

By letter to EPA dated May 3, 1996, the U.S. Fish and Wildlife Service (FWS) noted the potential for lead contamination at the Site to impact the Clinch River, where three endangered mussel species are found, and recommended that lead be removed to 500 ppm to avoid any such impacts. This Removal Action will meet this criteria. The OSC will continue to work with the FWS through the course of the Removal Action.

**VIII. ENFORCEMENT**

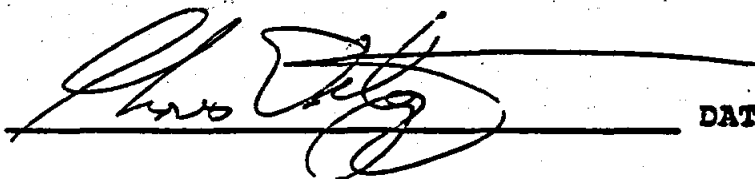
See Confidential Enforcement Addendum.

AR200009

**IX. RECOMMENDATION**

Because conditions at the Coeburn Dump Site meet the NCP criteria for a Removal Action (40 C.F.R. Section 300.415), I recommend your approval of this request for \$1,852,590, of which approximately \$1,611,150 are Extramural Costs. Please indicate your approval or disapproval by signing below. I recommend your approval to initiate response actions because of the nature of the threat described herein.

APPROVED:



DATE:

5/10/96

DISAPPROVED:

DATE:

**Attachments:**

1. Confidential Enforcement Addendum
2. Maps & Site Sketches
3. Analytical Summary with Sketches
4. Site Photographs
5. ATSDR Record of Activity

AR200010